Hydrogen purifiers proving vital to LED production

Device technologies are only as good as the quality of the source materials and none more so than the carrier gas. Becoming the home of the manufacture of new generation high brightness LEDs, SE Asia is also a major user of advanced gas purifiers.

Johnson Matthey Gas Purification Technology (GPT) group, have supplied a Model GPT-40 hydrogen purifier, capable of flowing 30 Nm/hr to Tekcore Company Ltd in Nantou, Taiwan. This is the third bulk purifier that Tekcore has purchased from Johnson Matthey and was secured by JM's Taiwanese agent, Pionics Corporation.

Tekcore, established in 2000, is a leading Asian manufacturer of high brightness LED wafers and chips. This new hydrogen purifier, along with the other JM hydrogen purifiers already in place, will supply ultrapure hydrogen to the growing number of MOVPE reactors at this site. Another Taiwanese customer is Epitech Corp., which has three model HTG-40 hydrogen purifiers at its fab in the Tainan Science Based Industrial Park in Taiwan.

Also, GPT has supplied Samsung Electro-Mechanics, a Model GPT-40 hydrogen purifier, capable of flowing up to 40 Nm3/hr of ultrapure hydrogen for its fab in Gyunggi-Do, Korea, where it makes LEDs.

China is also an important market for these purifiers as LED manufacture ramps up. Johnson Matthey GPT group has already supplied HTG-20 hydrogen purifiers to both Beijing Tsing Hwa Uni and Rainbow in China via Johnson Matthey distributor Gentech International.

"Obtaining these bulk hydrogen purifier orders reinforces Johnson Matthey and Gentech's commitment to the growing LED market in China," said Sean Peng, Asian Sales Manager of Gas Purification for GPT. "Our goal is to be the leading supplier of gas purification products to the Asian LED marketplace…securing these two projects keeps us headed in that direction".

Johnson Matthey's state-of-the-art bulk hydrogen purifiers are capable of providing 99.9999999% pure hydrogen for wafer fabrication and they have become the technology of choice for epitaxy and zero-gas generators used in the calibration of the most technologically advanced analytical equipment.

For more details, visit:
www.jmgpt.com

AIXTRON 5th in 2006 '10 BEST' VLSI Research survey

AIXTRON AG has maintained a strong position amongst the 10 BEST VLSI Research Inc independent Customer Satisfaction Survey in the category of 'Small Suppliers of Wafer Processing Equipment'.

This is the sixth consecutive award presented to AIXTRON AG by VLSI Research Inc. The 2006 10 BEST results are based on responses from equipment users representing 95% of the world's total semiconductor market. Survey respondents rated AIXTRON a 7.36 on a scale of 1 through to 10, with 10 being best.

The VLSI Research Inc Customer Satisfaction Survey is distributed worldwide in six languages and questions customers on thirteen critical criteria, seven in equipment performance and six in customer service. For customer service traits, AIXTRON tied for the top score in technical leadership among all Small Suppliers of Wafer Processing Equipment. Also, customers rated AIXTRON well in the equipment performance criteria, especially build quality and product performance with a 7.9 rating in both categories.

In other recent news, AIXTRON AG received an order for two more GaN MOCVD mass production systems from Samsung Electro-Mechanics Co. Ltd. (SEMCO) in the first quarter of 2006. AIXTRON expects shipment during the first half of 2006.

This order comprises two AIX 2600G3HT 24 × 2-inch configuration reactors, which will be delivered to SEMCO's facilities in Kyungki-Do, South Korea. These will be for the volume production of high brightness blue and white GaN-based LEDs.

For more details, visit:
www.aixtron.com

Equipments & Materials Processing

Ultra-short pulsed IV for SOI

Agilent Technologies' new parametric test solution for laboratory and R&D applications provides ultra-short pulsed IV measurements as narrow as 10ns. It makes possible precision testing of thermally or charge-sensitive devices such as silicon-on-insulator and high-k dielectric transistors used in high-speed logic applications.

Agilent demonstrated the instrument at the Agilent Measurement Forum in June in Japan with the B1500A Semiconductor Device Analyzer, an Agilent pulse generator, an Agilent digital oscilloscope, new application software and pulsed IV accessories.
www.agilent.com/see/B1500A

Age of steam returns

RASIRC, the steam purification company, has been selected by SEMI as a 2006 Technology Innovation Showcase (TIS) winner. As a TIS winner, RASIRC showcased its new ultra pure steam generation products and technology at SEMICON West.

The company was founded in February this year by Mr. Jeffrey Spiegelman, former president and founder of Aeronex, Inc., a company that designed and manufactured gas purification systems: "Until now, there has been no economical way to produce clean steam. RASIRC was founded to develop and deliver products that do just that. Although industrial applications have used steam for centuries, live steam purification hasn't been possible due to difficulties in material stability, effectiveness, and throughput. RASIRC technology addresses multiple market segments."
www.rasirc.com